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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,858	10/27/2006	Kazuhiko Ueda	Q95836	2917

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EXAMINER	
LOEWE, ROBERT S	

ART UNIT	PAPER NUMBER
1796	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/586,858	UEDA ET AL.	
	Examiner	Art Unit	
	ROBERT LOEWE	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 September 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-7,9 and 10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-7,9 and 10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments/remarks, filed on 9/23/09, regarding the prior art rejection of Toda et al. in view of Watabe et al. have been fully considered and are not found to be persuasive.

Applicants argue that both Toda et al. and Watabe et al. are drawn to sealing compositions while the instant claims are drawn to pressure-sensitive adhesive compositions. Because of this, Applicants argue that a person having ordinary skill in the art cannot create a pressure sensitive adhesive product from teachings directed to sealing materials. However, as argued in the previous Office action by the Examiner, the critical question which must be asked is: Do the combined teachings of Toda et al. and Watabe et al. render obvious the claimed composition?

The Examiner has maintained in the previous Office action (and again below) that the teachings of Toda et al. and Watabe et al. would lead a person having ordinary skill in the art to prepare a composition according to the instant claims. Since Toda et al. and Watabe et al. render obvious the claimed ingredients and claimed amounts, it inherently follows that the compositions would be capable of serving as pressure-sensitive products. A chemical composition and its properties are inseparable. Further, Applicants are merely alleging that pressure sensitive adhesive compositions cannot be prepared from compositions which are drawn to sealing compositions. As shown below (for the rejection of instant claim 9), it is well known in the art that silicone pressure sensitive adhesives may be prepared from the same base components as which are used to prepare silicone-based sealing materials. Further, instant claim 1, which now

requires that the curable material be applied to a support and cured, is also believed to be taught by Toda et al. in the rejection below.

The Examiners previous statement that sealant compositions benefit from having the ability to reseal has been withdrawn since it does not form an essential part of the 103(a) rejection below. The rejection is *prima facie* obvious despite this statement by the Examiner. Therefore, any arguments regarding this statement will not be addressed.

Last, Applicants argue that the present invention demonstrates unexpected improvement in adhesive strength. Applicants argue that the addition of component (B) serves to unexpectedly improve the adhesive strength of the pressure-sensitive adhesive compositions. However, the instant claims appear to be significantly broader than those specific results which are alleged to be unexpectedly better. The courts have stated that whether the unexpected results are the result of unexpectedly improved results or a property not taught by the prior art, the "objective evidence of nonobviousness must be commensurate in scope with the claims which the evidence is offered to support." In other words, the showing of unexpected results must be reviewed to see if the results occur over the entire claimed range. *In re Clemens*, 622 F.2d 1029, 1036, 206 USPQ 289, 296 (CCPA 1980). See MPEP 716.02(d). In the instant case, component (B) as claimed can be present from as low as 1 part by weight per 100 parts by weight of component (A) to as high as 100 parts by weight per 100 parts by weight of component (A), yet the working examples only show 30 or 40 parts by weight per 100 parts of component (A). Applicants would have to show criticality for the entire range of component (B) for these unexpected results to be commensurate in scope with the claims. Further only one single polyester resin tackifier is employed in all of the working examples in 50 parts by weight per 100

parts by weight of component (A), yet the instant claims allow for 30 to 100 parts by weight of four generic tackifier resins.

Applicants argue that the scope of amended claim 1 is commensurate with the Examples in the specification. However, for reasons given above, this is not believed to be the case. Applicant's alleged unexpected discovery that the addition of polymer (B) to polymer (A) composition dramatically improves the adhesive strength is noted. However, Applicants have not shown that the unexpected discovery that the addition of polymer (B) to polymer (A) occurs throughout the entire claimed range [that is, at both 1 part by weight of component (B) and 100 parts by weight of component (B) for 100 parts by weight of component (A)].

Last, Applicants argue that Toda teaches that a preferred molecular weight of polymer (a) of from 4,000 to 30,000, and exemplifies a molecular weight of 8,500, which is below the 20,000-50,000 range which Applicants claim for component (A). However, the preferred molecular weight range taught by Toda et al. still overlaps Applicants claimed range. A prior art reference may be relied upon for all that it teaches, including non-preferred embodiments.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toda et al. (JP 05-302026) in view of Watabe et al. (JP 05-059267). Certified English-language translations of Watabe et al. and Toda et al. (both already of record) will be relied upon in the rejection below

Toda et al. teaches a composition comprising (A) an oxyalkylene polymer having a molecular weight of from 4,000-30,000 and having at least two hydrolyzable silyl-groups at the chain ends (paragraph 0002), such oxyalkylene polymers being prepared by a hydrosilylation reaction of an allyl-terminated polyether with the silane of formula (1). Formula (1) of Toda et al. satisfies the structural limitations of formula (1) of the instant claims. Integer "a" can include 0 or 1, which inherently yields a polyether having greater than 2 hydrolyzable silanes per polymer. Toda et al. further teaches 3-60 parts of a resin (paragraph 0019) such as rosin ester resins (paragraphs 0015-0016). The amounts of polymer (a) and tackifier (c) as taught by Toda et al. overlap with those ranges recited in instant claims 1 and 8. Toda et al. further teaches curing the composition onto steel plates, which qualify as a support material required by instant claim 1. While Toda et al. does not teach that the materials are thermally cured (Toda et al. teaches curing at room temperature), claim 1 is written using product-by-process format. Even though product-by-process claims are limited and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious

from a product of the prior art, the claim is unpatentable even thought the prior art product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Toda et al. does not explicitly teach the addition of an oxyalkylene polymer having the structural and molecular weight limitations of instant claim 1 [component (B) of instant claim 1]. However, Watabe et al. does teach the addition of such oxyalkylene polymers (paragraphs 0030-0036) which substantially comprise polyethers and preferably have from 0.5 to 1.2 hydrolyzable groups per polymer and preferably have molecular weights of from 2,000 to 4,000. The molecular weight range and hydrolyzable group content satisfy the limitations of component (B) of instant claim 1. Watabe et al. further teaches that the amount of component (B) should preferably be from 1 to 100 parts per 100 parts by weight of the higher molecular polymer (1) (paragraph 0036), which represents the same type of higher molecular weight polymer as taught by Toda et al. Therefore, Watabe et al. teaches the amount requirement of component (B) of the instant claims. Toda et al. and Watabe et al. are combinable because they are from the same field of endeavor, namely, curable compositions comprising silyl-terminated polyethers and curing catalysts. Further, both Toda et al. and Watabe et al. are interested in preparing compositions which are used as sealants. At the time of the invention, a person having ordinary skill in the art would have found it obvious to add the low molecular weight oxyalkylene polymers as taught by Watabe et al. into the compositions taught by Toda et al. and would have been motivated to do so since Watabe et al. teaches that the low molecular weight oxyalkylene polymers are effective plasticizers and display low migration, allowing the compositions to be pliable (paragraphs 0003 and 0007). Watabe et al. further teaches that the low molecular weight

oxyalkylene polymers are superior plasticizers when compared to other known plasticizers such as phosphoric acid esters, and aromatic carboxylic acid esters (paragraphs 0006 and 0007). Toda et al. teaches the addition of plasticizers which include the same phosphoric acid esters and aromatic carboxylic acid esters plasticizers as taught by Watabe et al. (paragraph 0023 of Toda et al.). Based on the teachings of Watabe et al., a person having ordinary skill in the art would be motivated to employ the oxyalkylene polymer plasticizers as taught by Watabe et al. into the compositions as taught by Toda et al. because such oxyalkylene polymer plasticizers have improved properties over the plasticizers taught by Toda et al. as shown by Watabe et al. (Table 1). Embodiment 5 of table 1 shows the employment of dioctylphthalate instead of the oxyalkylene polymer plasticizer showed a dramatically higher weight loss.

Claim 10: While Toda et al. does not teach curing the compositions taught therein in the manner of instant claim 10, instant claim 1 is written using product-by-process format. Even though product-by-process claims are limited and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even thought the prior art product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Toda et al. (JP 05-302026) in view of Watabe et al. (JP 05-059267), as applied to claim 1 above, further in view of

Hirose et al. (US Pat. 5,631,082). Certified English-language translations of Watabe et al. and Toda et al. (both already of record) will be relied upon in the rejection below.

Toda et al., in view of Watabe et al., render obvious the claimed composition. While neither Toda et al. nor Watabe et al. explicitly teach that the compositions may be applied to the specific support materials as required by instant claim 9, such an intended use would have been obvious to a person having ordinary skill in the art based on the teachings of Hirose et al. Specifically, Hirose et al. teaches silicone-based pressure-sensitive materials which are comprised of the same principal ingredients as Toda et al., namely, a hydrolyzable silane-terminated polyether, tackifier, curing catalyst and filler. Hirose et al. teaches application of the compositions taught therein to sheets, such as for example silicone release paper (10:34-39). Hirose et al. and Toda et al. are combinable because they are both drawn to curable silane-terminated polyether-based compositions. At the time of the invention a person having ordinary skill in the art would have found it obvious to employ the compositions as taught by Toda et al. in the manner required by instant claim 9; that is to coat the compositions as taught by Toda et al. onto the thin film and metal foil substrates of instant claim 9 and would have been motivated to do so since Hirose et al. teaches that silicone-based pressure sensitive adhesives may be prepared from compositions which have markedly similar base ingredients compared with the compositions taught by Toda et al.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Loewe whose telephone number is (571)270-3298. The examiner can normally be reached on Monday through Friday from 5:30 AM to 3:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. L./
Examiner, Art Unit 1796
28-Sep-09

/Randy Gulakowski/
Supervisory Patent Examiner, Art Unit 1796